DNV-GO2

Digital Night Vision

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Package Content

- ◎ 1 X DNV-GO2 goggle with CCD-Lens f0.95/16mm
- ◎ 1 X AC-Adapter
- ◎ 2 X Eye-Cups
- ◎ 1 X Lithium-Ion rechargeable Battery
- ◎ 1 X Set of Earphones
- ◎ 1 X Cinch to cinch A/V Connector
- ◎ 1 X Multimedia to A/V split out Cable
- ◎ 1 X Cinch to Multimedia Adapter Cable
- ◎ 1 X User Manual

Troubleshooting

There is no image on the LCoS-displays or there are only blank screens:

◎ Is the power connected correctly?
◎ Is the Battery charged?
◎ Is the Lens cap removed?
◎ Is the mode switch on "camera "(for goggle camera display)?
◎ Is the mode switch on "video"(for external video input)?
△ Is video player/external camera connected and running?
△ If there is no video signal in, no image is displayed on the LCoS-displays.

The image displayed is not sharp:

◎ Is the Lens focused?
◎ Did you try adjusting Brightness "and "Contrast "?
◎ Turn the Battery "off ", then "on "to reset Brightness and Contrast to standard mode.

It is impossible to get a usable image:

The light conditions are too low. Use the LEDs on the goggle for illumination. Use as little LED power as possible in order to get a sharp picture. If the picture is still not acceptable, then the object you intent to view is at a distance of more than 90 ft. You may then use an additional infrared illuminator (for example. our NOC-LITE i21) for viewing up to 200 ft in complete darkness.

Technical Specifications

Virtual screen:36" (92CM)

Displays

◎ 2*230,000pixels LCoS-displays (Liquid Chrystal on Silicon)
◎ Brightness and Contrast adjustable

Camera

◎ Sony-CCD Camera(black and white)
◎ Resolution: 500H*582V (291,000 pixels)
◎ Illuminance: 0.003 lux
◎ Enhanced electronic features

Objective

◎ CCD f0.95/16mm
◎ Magnification: 2x
◎ Angle of view horizontal: 21°
◎ Focus adjustment from 18.4" to infinity

LEDs(light emitting diodes)

◎ 8infrared 850nm LEDs
◎ Radiant intensity:140mW/sr(each LED)
◎ Progressive adjustment of output power (0-1.2w)

Features

◎ Video out (analog)-PAL System [500H X 582V(CCIR/PAL)]
◎ Video in(analog)-PAL/NTSC
◎ Audio in - standard multimedia plug

Power consumption: About 2.5w

Accumulator(rechargeable Battery)

◎ DNV-LB Lithium-Ion Accumulator
◎ 3 to 5 hours working time(depending on viewing conditions)
◎ Charge the lithium-Ion rechargeable Accumulator via AC-Adapter(included)

Weight: 8.11oz(230g)

Description

Congratulations on the purchase of your DNV-GO2

DNV-GO2 is a digital night vision goggle that offers a new night vision experience! DNV-GO2 allows you to see in dark conditions that are too dark for the naked eye. Enjoy the impressions of a virtual 36" screen at the distance of 6ft!

The lightweight head-mounted DNV-GO2 keeps your hands free with the ability to flip it up out of your line of sight!

With DNV-GO2 additional A/V options, you can in complete darkness record and broadcast night events. Naturally, the A/V input allows connecting an additional camera to the DNV-GO2 for covert observation.

DNV-GO2 is equipped with power-adjustable infrared LEDs for additional illumination. The DNV-GO2 is ideal for:

◎ Viewing animals in the darkened wilderness
◎ Observing night intruders on the property
◎ Supporting night orientation and safety for boating(MOB)
◎ Observing other outdoor activities

DNV-GO2 is ready for the Certified Sport Professional to create night group sport events. These activities not be performed by a consumer. A Certified Sport Professional is required to design a safe sport with the appropriate safety and medical services

Examples of possible night group sports are:

◎ Skiing
◎ paintball
◎ Skateboarding
◎ Trekking
◎ Sailing/Boating

Warnings

Please read the DNV-GO2 safety instructions completely before using. To avoid any damage to your eyes, vision functions, property damage or death, strict compliance with this DNV-GO2 user manual is required.

Use the product only for its intended use, as described in the manual.

The use of this device under the age of 18 is prohibited. Familiarization with the device in a safe environment is strongly recommended for first time use. One should repeatedly practice with all the controls in a non-stressful situation.

Safety Instructions

Restricted use

DNV-GO2 use is prohibited with all vehicular equipment including boats, automobiles, airplanes, bicycles, etc.

DNV-GO2 is not meant to support any form of transportation.

DNV-GO2 is a piece of equipment produced for adults. No child under 18 should be allowed access to this equipment.

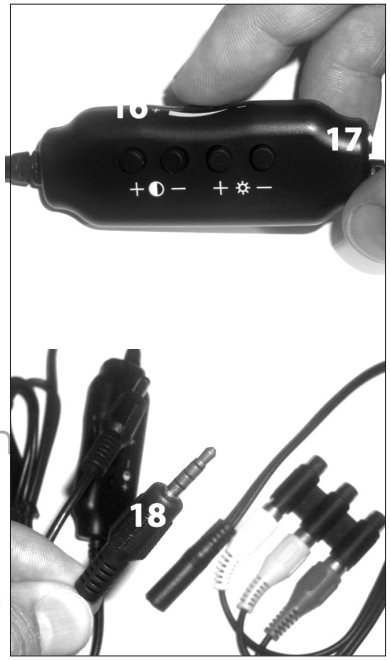
Do not put the cable around the neck, body or arms. Secure the battery in front or back of the body to your belt to provide a straight cable connection from the goggle to the battery and keep the cable close to your bodyto avoid entanglement.

To ensure that the goggle does not fall off during use, always use the elastic strap, and have it tightened with an adequate tension.

Be aware. If you push the switch marked "camera" to the position marked "video", you will switch off the camera. You then will be no longer able to see your environment. The same problem will occur if the battery is empty and needs recharging. Therefore. The Battery should be fully charged before using the goggle.

For best night vision results, first adjust Contrast; then adjust Brightness. Repeat these steps until the picture is optimal (bright picture with good contrast).

On the remote control unit (for "Brightness" and "contrast") is also an Audio extension socket (17) and a Volume control wheel (16) to adjust the Audio input.



Video output PAL-System

The DNV-GO2 has a video out plug (18). This plug can be connected to a video recorder that accepts the PAL-Standard [500H*582V(CCIR/PAL)]. This enables you to record, What you are observing through the goggle.

Care and Maintenance

The DNV-GO2 is a delicate piece of equipment, therefore one should avoid any mechanical shocks to the frame. displays, lenses or other accessories.

Never open the case of the goggle. The parts inside are very delicate and can only be serviced by the manufacturer.

When not being used, the DNV-GO2 should be turned off, unplugged and stored in a warm, dry location avoiding high humidity and extreme temperatures. Recommended temperatures are between +50° F and +104° F

Keep the device perfectly clean. Clean it using a dry soft cloth. Switch off the device when cleaning it.

In case there is dust or moisture behind the LCoS-displays, switch off the device and contact your dealer or the manufacturer.

The output of the infrared LEDs can be adjusted by turning the wheel marked "LED adjust" (3) above the LEDs.

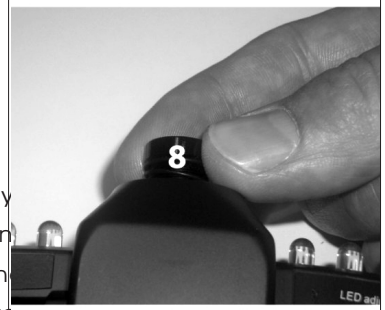
Note: Always start with LEDs turned off or turned down to zero power(turn the little wheel (3) completely to the left when wearing the goggle).Add LED power by small increments. Wait a couple of secon after each increment, so that the camer can adjust to new conditions.

For brightness and contrast control:

When the DNV-GO2 is turned on, the camera automatically adjusts to the light conditions and finds a good balance for the night vision.

First make sure the picture is sharp; adjust the focus of the objective (8) by turning it left or right.

Caution: Do not turn too far; the lens may drop out of its mount. In care this happen clean the objective(lens)carefully and th put it back without letting dust or moisture into the inside of the goggle.



If the picture is in focus, start adjusting Brightness and Contrast manually. A Short tip on the button increases or decreases the Brightness (14) and the Contrast (15) by one step. Do not press the buttons continuously.

The DNV-GO2,the Battery and the AC-Adapter are electrical products, that if misused can lead to electrocution. Therefore, avoid any contact with water, moisture or any other fluids. To avoid any risk of electrocution. do not bring any part of the DNV-GO2 in contact with water. when the AC -Adapter is connected to an AC outlet(e.g.when recharging batteries, using an external TV-.DVD-.Video-or PC source).

Improper use may result in unforeseen accidents, injuries or death to the user or to others.

Health Restrictions

For all individuals who have eye disorders of any type including eye diseases. eye injury, and/or Glaucoma; do not use the DNV-GO2 until you have your doctor s approval.

Individuals with any history of heart disease, high blood pressure or any other disability or disease should acquire their doctor's approval before first time usage.

The DNV-GO2 uses pulsating infrared LEDs, therefore it should never be used by individuals who wear pacemakers or other vital life support equipment.

Consult your doctor before using the goggle, if you have problems with seizures such as seizures from light stimulation, temporary spasm, unconsciousness, or epileptic.

Immediately stop using the DNV-GO2, if you experience any of the following symptoms:

◎ Eye fatigue
◎ Eye irritation, headaches
◎ Dizziness, shoulders or neck aches and pain
◎ Double vision
◎ Nausea or motion sickness

Eye damage or loss of visual capability may result due to improper use, overuse or misuse of this product. If your eyes are not able to focus in, on the display, discontinue use and contact your eye doctor; you may need eye glasses.

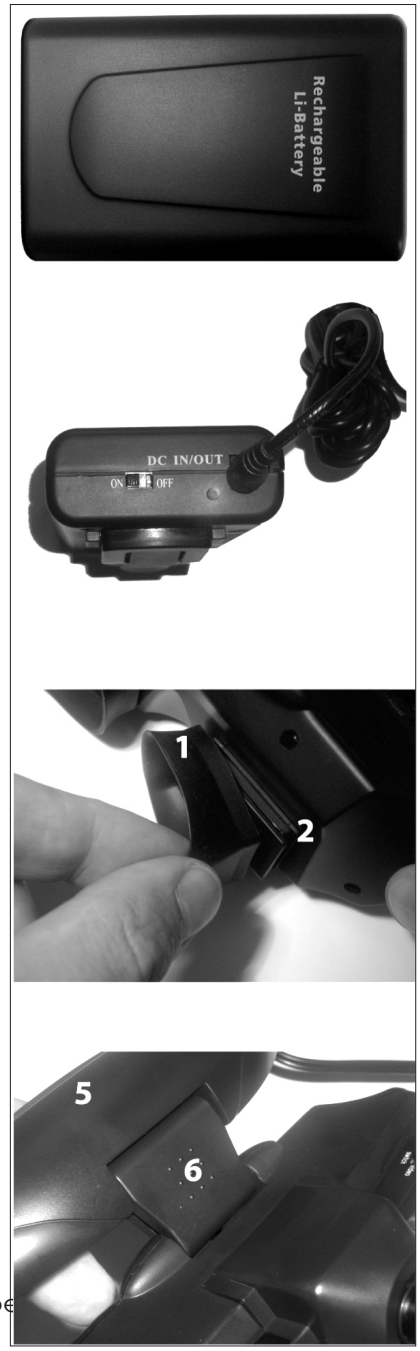
Before First use

1. Read he Safety Instructions (see page 4 and 5)

2. Connect the AC-Adapter to the lithium-Ion rechargeable Battery.

3. Connect the AC-Adapter to the AC outlet. The switch on the Battery must be in "ON" position!

4. Fully load the Battery for the first use. Initial charging time will not be less than 3 hours. Loading is complete, when the red LED-Light is off.



Instructions for use

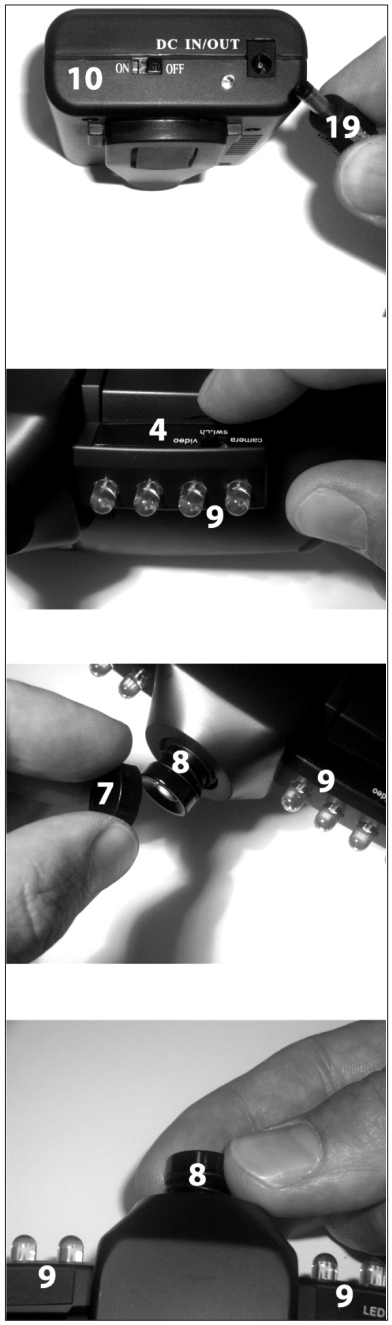
Mount the rubber Eye-Cups (1) by placing them onto the frame of the LCoS-displays (2).

Note: If you wear glasses you might feel more comfortable without the Eye-Cups.

Adjust the elastic head strap and have it tightened with an adequate tension.

Put the goggle(5)in place by rotating it around the connecting Hinge(6).

Note: Hinge and goggle cannot be fixed in the up-position.



Connect the cable of the goggle with its power plug (19) to the lithium -Ion Battery(10).

Note:(see page 9)The other plug (18)on the cable is the video-out connector for external devices like VCR, Camcorder etc.

The Battery (10) with its integrated clip should be securely fixed to your belt.

Above the LEDs, on the side, is a switch (4) to choose either "camera" or "video". Switch to "camera2 for using the DNV-GO2 as a night vision goggle. Switch to "video" for displaying from external devices onto the LCoS-displays of the goggle.

Note: If you push the switch marked 'camera' to the position marked "video, You will switch off the camera. You then will no longer be able to see your environment.

Take off the protective lens/objective cover (7)of the objective (8).

By turning the objective (8) you can focus the image depending on the distance to the object to observe.

The eight infrared LEDs (9) are placed to the left and to the right of the objective (8); their output can be adjusted progressively.